

REMARKS**Status of Claims:**

Claims 1-34 are pending in the application. Each claim defines an invention that is novel and unobvious over the cited art. Favorable consideration of this case is respectfully requested.

Disclosure Supporting the Instant Amendment:

Claims 1 and 23 are amended to recite: "applying an intact and contiguous film of a fluid to said surface" Support for this recitation was present in the original disclosure at, for example, page 4, line 5.

Rejection Under 35 U.S.C. § 102(b):

Claims 1-12, 14-21, and 23-33 were rejected under 35 U.S.C. § 102(b) as being anticipated by Sakai (5,857,474).

Rejection under 35 U.S.C. § 102 requires the prior art disclose each and every limitation of the claimed invention (MPEP § 706.02). In determining anticipation, no claim limitation may be ignored. See *Pac-Tex, Inc. v. Amerace Corp.*, 14 USPQ2d 1871 (Fed. Cir. 1990). Anticipation requires the disclosure, in a prior art reference, of each and every recitation as set forth in the claims. See *Titanium Metals Corp. v. Banner*, 227 USPQ 773 (Fed. Cir 1985), *Orthokinetics, Inc. v. Safety Travel Chairs, Inc.*, 1 USPQ2d 1081 (Fed. Cir 1986), and *Akzo N.V. v. U.S. International Trade Commissioner*, 1 USPQ2d 1241 (Fed. Cir 1986). There must be no difference between the claimed invention and reference disclosure for an anticipation rejection under 35 U.S.C. § 102. See *Scripps Clinic and Research Foundation v. Genentech, Inc.*, 18 USPQ2d 1001 (CAFC 1991) and *Studiengesellschaft Kohle GmbH v. Dart Industries*, 220 USPQ 841 (CAFC 1984). The evidentiary record fails to teach each limitation of the present invention, as amended, in view of the silence of Sakai regarding applying "an intact and contiguous film of a fluid" to a surface.

Claims 1 and 23 are amended to more clearly point out that “an intact and contiguous” layer of water is applied to a surface of a substrate to loosen contaminants thereon.

The present invention forms a solid layer of ice – an intact and contiguous film – on the surface of a substrate having contaminants thereon. In contrast to forming a solid layer, Sakai forms pieces of ice around individual contaminant particles. Figure 2 of Sakai clearly depicts individual pieces of ice H formed around pieces of contaminants P. Sakai explicitly describes Figure 2 as “pieces of ice H are so produced as to enclose particles P on the substrate W as condensation nuclei.” (Column 4, lines 28-30).

Rejection Under 35 U.S.C. § 103(a):

Claims 13, 22, and 34 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Sakai in view of Williams (4,491,484).

To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*. All words in a claim must be considered in judging the patentability of that claim against the prior art. *In re Wilson*. (MPEP § 2143.03). When evaluating the scope of a claim, every limitation in the claim must be considered. See e.g. *In re Ochiai*. (MPEP § 2144.08). The evidentiary record fails to teach each limitation of the present invention. Specifically, the references taken as a whole or severally fail to teach removal of a solid layer.

As discussed above, Sakai fails to disclose an intact and contiguous film. Williams does not complete the teaching because Williams merely teaches cryogenic liquids.

Conclusion:

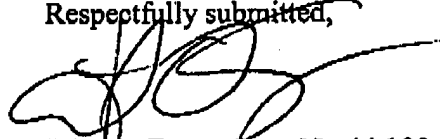
In view of the above, consideration and allowance are, therefore, respectfully solicited.

Accordingly, it is respectfully requested that the foregoing amendments be entered, that the application as so amended receive an examination on the merits, and that the claims as now presented receive an early allowance.

In the event the Examiner believes an interview might serve to advance the prosecution of this application in any way, the undersigned attorney is available at the telephone number noted below.

The Commissioner is hereby authorized to charge any fees or credit any overpayment associated with this communication, including any extension fees or fees for the net addition of claims, to Deposit Account No. 22-0185.

Respectfully submitted,



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